



PATENT  
DOCKET NO. 4030B

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent No.: 6,110,867

Issued: August 29, 2000

Title: METHOD FOR PROVIDING ENHANCED PHOTOSYNTHESIS

Commissioner of Patents and Trademarks  
Washington, DC 20231

JUN 05 2007

TECH CENTER 1600/2900

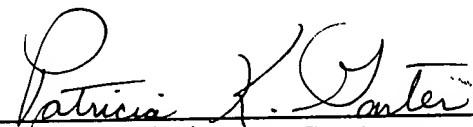
RECEIVED

CERTIFICATE OF MAILING UNDER 37 CFR 1.8(a)

I hereby certify that the attached correspondence comprising:

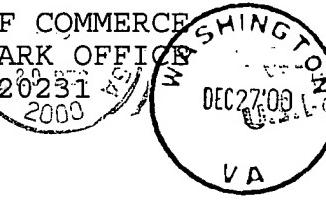
1. Request for Certificate of Correction or Corrected Patent for Patent Office Mistake (37 CFR 1.322)
2. Form PTO 1050 in duplicate
3. Copy, Notice of Recordation of Assignment Document
4. Copy, Form PTOL-85B

is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231 on December 11, 2000.

  
\_\_\_\_\_  
Patricia K. Gonter

EL108347831US

U. S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231

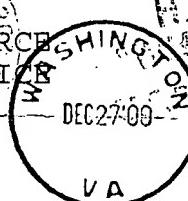


A rectangular U.S. Official Mail stamp with a black border. The words "U.S. OFFICIAL MAIL" are at the top, followed by "U.S. POSTAGE". Below this is a circular postmark with the date "JULY 1971" and the letters "WASH D.C.". To the left of the postmark, the words "PENALTY FOR PRIVATE USE \$300" are printed vertically. To the right of the postmark, there are three five-pointed stars of increasing size from bottom to top. The entire stamp is set against a white background.

A request for a Certificate of Correction has been received for U.S. Patent 6110867

STEPHEN I. MILLER  
ENGELHARD CORPORATION  
101 WOOD AVENUE, P.O.BOX 770  
ISELIN, NJ 08830

U. S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231



A rectangular U.S. Official Mail stamp. At the top, it says "U.S. OFFICIAL MAIL" and "U.S. POSTAGE". Below that is a large circular postmark with the text "U.S. POSTAGE" and "00.20". To the right of the postmark are three five-pointed stars.

A request for a Certificate of Correction has been received for U.S. Patent 6110867.

STEPHEN I. MILLER  
ENGELHARD CORPORATION  
101 WOOD AVENUE  
ISELIN, NJ 08830



4030B

JUN 05 2007

TECH CENTER 1600/2900

RECEIVED

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Number: 6,110,867

Issued: August 29, 2000

Name of Patentee(s): Glenn, et al.

Title of Invention: METHOD FOR PROVIDING ENHANCED PHOTOSYNTHESIS

Assistant Commissioner for Patents  
Washington, DC 20231

**ATTENTION: Decision and Certificate of Correction  
Branch of the Patent Issue Division**

REQUEST FOR CERTIFICATE OF CORRECTION OF APPLICANT'S MISTAKE  
(37 CFR 1.323)

1. It is noted that an error appears in this patent of a minor nature or character as more fully described below and occurred in good faith, and correction thereof does not involve such changes in the patent as would constitute new matter or would require re-examination, and a Certificate of Correction or corrected patent is requested.
2. Attached hereto in duplicate is Form PTO-1050 with at least one copy being suitable for printing.
3. The exact page and line number where the error occurs on the patent is:

On Page No. 1, at [73], the Assignees should read "Engelhard Corporation, Iselin, New Jersey, USA" and "The United States of America, as represented by the Secretary of Agriculture, Washington, D.C., USA". A copy of PTOL-85B and a copy of Applicant's Assignment recordation information sheet are attached.

4. Please send the Certificate of Correction or corrected patent to:

Chief Patent Counsel  
Engelhard Corporation  
101 Wood Avenue  
Iselin, NJ 08830-0770

5. Mistake was due to Applicant's error. Please charge all fees to Deposit Account No. 05-1070.  
A duplicate of this request is attached.

December 11, 2000

By:   
Stephen I. Miller  
Attorney for Applicant  
Reg. No. 27,927

Engelhard Corporation  
101 Wood Avenue  
Iselin, NJ 08830

Assignment Recorded on April 13, 1998  
Reel 9145, Frame 0424

**TYPIST**

**YOU MAY SEPARATE FORM AT PERFORATION BELOW FOR CORRECTIONS  
WITHOUT REMOVING SET FROM YOUR TYPEWRITER.**

★ U.S. GOVERNMENT PRINTING OFFICE: 1993 - 361 - 016

**U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office**

**INSTRUCTIONS:** This Form is for use in preparing Certificate of Correction copy for printing by the Patent and Trademark Office.

- Return both parts of this form. **DO NOT FURNISH PHOTOCOPIES FOR PRINTING.**
- Type within the borders printed on the form.
- Use a typewriter that will give clean, clear impressions. Unsuitable copy will have to be retyped and therefore delay printing.  
    Use a typewriter with a carbon ribbon if possible. If a fabric ribbon typewriter is used, the ribbon should be medium inked and in good condition. Changes are best made with white correction fluid.
- If necessary, staple in the area indicated in the left margin, **ONLY.**
- Type mailing address and patent number below within the perforated area.
- Indicate additional printed copies requested 50¢ per page.
- A two-inch blank space should be left at the bottom of the last page of the form for the placement of the signature of the Attesting Officer.

**DETACH HERE BEFORE MAILING BOTH COPIES OF THE TYPED CERTIFICATE TO THE PATENT AND TRADEMARK OFFICE**

Staple  
Here  
Only!

PRINTERS TRIM LINE

**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**

PATENT NO. : 6,110,867

DATED : August 29, 2000

INVENTOR(S) : David Michael Glenn, Dennis G. Sekutowski, Gary J. Puterka

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On Page 1, at [73], the Assignees should read "Engelhard Corporation, Iselin, New Jersey USA" and "The United States of America, as represented by the Secretary of Agriculture, Washington, D.C., USA".



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

# 24

JULY 02, 1998

PTAS



\*100697978A2

RECEIVED

JANELLE S. GRAETER  
USDA-ARS-OTT  
BLDG. 005, RM. 409, BARC-W  
10300 BALTIMORE BLVD  
BELTSVILLE, MARYLAND 20705

JUN 05 2007

TECH CENTER 1600/2900

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION  
OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS  
AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER  
REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE  
INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA  
PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD  
FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY  
CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723.  
PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE,  
ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY,  
SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 04/13/1998

REEL/FRAME: 9145/0424  
NUMBER OF PAGES: 2

BRIEF: ASSIGNMENT OF ASSIGNEE'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
PUTERKA, GARY J.

DOC DATE: 02/24/1998

ASSIGNOR:  
GLENN, D. MICHAEL

DOC DATE: 02/24/1998

ASSIGNEE:  
AGRICULTURE, UNITED STATES OF  
AMERICA, THE, AS REPRESENTED BY  
THE SECRETARY OF  
WASHINGTON, D.C. 20250SERIAL NUMBER: 08972659  
PATENT NUMBER:FILING DATE: 11/18/1997  
ISSUE DATE:

M.R.D.

4-10-98

04-29-1998

Tab settings □ □ □ □

To the Honorable Commissioner of

SHEET

Y

is attached original documents or copy thereof.

## 1. Name of conveying party(ies):

Gary J. Puterka and D. Michael Glenn

Additional name(s) of conveying party(ies) attached?  Yes  No

## 3. Nature of conveyance:

 Assignment Merger Security Agreement Change of Name Other \_\_\_\_\_

Execution Date: 02/24/98

## 2. Name and address of receiving party(ies):

Name: The United States of America, as  
represented by the Secretary of Agriculture  
Internal Address: \_\_\_\_\_

Street Address: \_\_\_\_\_

City: Washington State: DC ZIP: 20250

Additional name(s) & address(es) attached?  Yes  No

## 4. Application number(s) or patent number(s): 08/972,659

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

## A. Patent Application No.(s)

## B. Patent No.(s)

Additional numbers attached?  Yes  No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Janelle S. Graeter

Internal Address: USDA-ARS-OTT

Bldg. 005, Rm. 409, BARC-W

Street Address: 10300 Baltimore Blvd

City: Beltsville, State: MD ZIP: 20705

## 6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$ 40.00

 Enclosed Authorized to be charged to deposit account

8. Deposit account number: 21-0559

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

## 9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Janelle S. Graeter

Name of Person Signing

Janelle S. Graeter

Signature

4-10-98

Date

Total number of pages comprising cover sheet: 3

## ASSIGNMENT

PATENT 4030B  
08/972,659

WHEREAS, we,

Gary J. Puterka, Rte. 1; Box 279; Billmyer Road; Shepherdstown, West Virginia 25443  
D. Michael Glenn, P.O. Box 1408; Shepherdstown, West Virginia 25443

citizens of the United States of America

are the inventors of an invention entitled:

## METHOD FOR PROVIDING ENHANCED PHOTOSYNTHESIS

for which we have executed an application for Letters Patent of the United States; and

WHEREAS, THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY OF AGRICULTURE is desirous of obtaining the entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we the undersigned have sold assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY OF AGRICULTURE, its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said invention, and the said application and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may hereafter be filed for said invention in any country or countries foreign to the United States, and all Letters Patent which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof and all rights of priority in any such country or countries based upon the filing of the said application for Letters Patent of the United States which are created by any law, treaty or international convention; and hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY OF AGRICULTURE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant that we have full right to convey the entire interest herein assigned, and that have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to said THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY OF AGRICULTURE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY OF AGRICULTURE its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

IN TESTIMONY WHEREOF, we hereunto set our hands and seals the day and year set opposite our respective signatures.

Date Feb 24 1991

  
Gary J. Puterka

Date Feb 24 1991

  
D. Michael Glenn

RECEIVED

## PART B—ISSUE FEE TRANSMITTAL

Complete and mail this form, together with applicable fees, to:

Box ISSUE FEE  
Assistant Commissioner for Patents  
Washington, D.C. 20231

JUN 05 2007

MAY 31 2007

(HL)

**MAILING INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE. Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Issue Fee Receipt, the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

CHIEF PATENT COUNSEL  
ENGELHARD CORPORATION  
101 WOOD AVENUE

HM22/1025

ISELIN NJ 08830-0770

Note: The certificate of mailing below can only be used for domestic mailings of the Issue Fee Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing.

## Certificate of Mailing

I hereby certify that this Issue Fee Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above on the date indicated below.

Donna Foligno

(Depositor's name)

*Donna Foligno*

(Signature)

November 17, 1999

(Date)

APPLICATION NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
08/972,659	11/18/97	053	PRYOR, A	1616 10/25/99
First Named Applicant	GLENN,	35 USC 154(b) term ext. =		0 Days.

TITLE OF INVENTION METHOD FOR PROVIDING ENHANCED PHOTOSYNTHESIS

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEES DUE	DATE DUE
1 4030B	504-119.000	D33	UTILITY	NO	\$1210.00	01/25/00

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Use of PTO form(s) and Customer Number are recommended, but not required.

Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

"Fee Address" indication (or "Fee Address" Indication form PTO/SB/47) attached.

2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 Raymond F. Keller

2 \_\_\_\_\_

3 \_\_\_\_\_

## 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the PTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE ENGELHARD CORPORATION

(B) RESIDENCE: (CITY &amp; STATE OR COUNTRY) ISELIN, NEW JERSEY USA

Please check the appropriate assignee category indicated below (will not be printed on the patent)

individual  corporation or other private group entity  government

4a. The following fees are enclosed (make check payable to Commissioner of Patents and Trademarks):

Issue Fee  
 Advance Order - # of Copies \_\_\_\_\_

4b. The following fees or deficiency in these fees should be charged to:

DEPOSIT ACCOUNT NUMBER 05-1070  
(ENCLOSE AN EXTRA COPY OF THIS FORM)

Issue Fee  
 Advance Order - # of Copies 10

The COMMISSIONER OF PATENTS AND TRADEMARKS IS requested to apply the Issue Fee to the application identified above.

(Authorized Signature)

Raymond F. Keller *Raymond F. Keller*

(Date)

11-17-99

NOTE: The Issue Fee will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the Patent and Trademark Office.

**Burden Hour Statement:** This form is estimated to take 0.2 hours to complete. Time will vary depending on the needs of the individual case. Any comments on the amount of time required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND FEES AND THIS FORM TO: Box Issue Fee, Assistant Commissioner for Patents, Washington D.C. 20231

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMIT THIS FORM WITH FEE



RECEIVED

JUN 05 2007

TECH CENTER 1600/2900

PATENT - US

Serial No. 08/972,659 Atty. Docket No. 1030B Atty. RFK  
Title Method for Providing Enhanced Photosynthesis

Receipt of the following is acknowledged by the USPTO on the date stamped hereon.

- Patent Application Including
- \_\_\_\_\_ Pgs. Spec & Abstract
  - \_\_\_\_\_ Pages of Claims
  - \_\_\_\_\_ Sheets of Drawings
    - Formal       Informal
    - Oath or       Declaration
  - 37 CFR 1.60 Application
    - Div.       Cont.
  - 37 CFR 1.62 FWC Application
  - Transmittal Letter
  - Certificate of Mailing
  - Auth to Charge Dep. Account
  - Prel. Amendment
  - Assignment for Recording
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
- (2) 11/00*
- Response to Office Action
- (2) 11/00*
- Petition to Extend \_\_\_\_\_ Mos.
- \_\_\_\_\_ Decl. of Affs. 37 CFR \_\_\_\_\_
- Notice of Appeal
- Appeal Brief in Triplicate
- Petition Under 37 CFR \_\_\_\_\_
- Info. Disclosure, \_\_\_\_\_ Refs.
- Supplemental Oath or Decl.
- 37 CFR 1.312 Amendment
- Issue Fee Transmittal
- Maintenance Fee Transmittal
- Request for Cert. of Corr.

PLEASE STAMP US SERIAL NO. HERE

PATENT - US

Serial No. 08/972,659 Atty. Docket No. 1030B Atty. RFK  
Title Method for Providing Enhanced Photosynthesis

Receipt of the following is acknowledged by the USPTO on the date stamped hereon.

- Patent Application Including
- \_\_\_\_\_ Pgs. Spec & Abstract
  - \_\_\_\_\_ Pages of Claims
  - \_\_\_\_\_ Sheets of Drawings
    - Formal       Informal
    - Oath or       Declaration
  - 37 CFR 1.60 Application
    - Div.       Cont.
  - 37 CFR 1.62 FWC Application
  - Transmittal Letter
  - Certificate of Mailing
  - Auth to Charge Dep. Account
  - Prel. Amendment
  - Assignment for Recording
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
- (2) 11/00*
- Response to Office Action
- (2) 11/00*
- Petition to Extend \_\_\_\_\_ Mos.
- (2) 11/00*
- \_\_\_\_\_ Decl. of Affs. 37 CFR \_\_\_\_\_
- Notice of Appeal
- Appeal Brief in Triplicate
- Petition Under 37 CFR \_\_\_\_\_
- Info. Disclosure, \_\_\_\_\_ Refs.
- Supplemental Oath or Decl.
- 37 CFR 1.312 Amendment
- Issue Fee Transmittal
- Maintenance Fee Transmittal
- Request for Cert. of Corr.

PLEASE STAMP US SERIAL NO. HERE

